



South 4 Group Fire Port Neches, Texas Water Management Plan

Version 1.1

Prepared on behalf of:
TPC Group

Prepared By:
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December 1, 2019

	Name/Organization	Signature	Date Signed
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Draft
Version 1.1

1.0 INTRODUCTION AND PURPOSE

This Water Management Plan prepared by CTEH, LLC (CTEH®), on behalf of TPC Group LLC (TPC) was developed, and will be implemented, to provide technical guidance for potential chemical releases into waters at or around the TPC Port Neches Facility located at 2102 Spur 136, Port Neches, TX 77651 (the “Site”— see Figure 1-Appendix A). A site map is shown in **Figure 1**. During the subsequent fire suppression and initial response activities, water containing various organic chemicals and aqueous film forming foam (AFFF) was potentially released into the environment via fire water conveyances from the facility.

The goal of the Water Management Plan is to send all waters to the Joint Waste Water Treatment Plant (JWWTP) prior to discharge.

2.0 RESPONSE ACTIVITIES

Initial response activities included the deployment of several booms to limit offsite migration of fire water. A map of boom locations on November 30, 2019 is shown in Figure 2. Fire water from the Site continues to be partially contained in onsite holding ponds in block 6. Typically, all process water is pumped from the pumping station at the Block 6 ponds to the JWWTP, located south of the TPC Group facility which is shared with Huntsman Petrochemical (Operator), TPC Group, and Lion Elastomers. Treated waste water is funneled to the holding pond immediately south of the treatment plant (located at 29°58'01.0"N 93°56'57.8"W). Water from the holding pond is subsequently pumped through the Joint Waste Water Treatment Plant, treated and discharged to the 001 Outfall Canal and then pumped to the wetlands to the northeast of the Huntsman Chemical Plant (near 29°58'16.1"N 93°55'35.2"W). Water slowly moves from the wetland toward the Neches River, then to an earthen canal to the 004 Outfall, the final discharge point to the Neches River. Additionally, discharge can also occur over the 001 Outfall Canal dam (near 29°58'4.51"N, 93°55'18.31"W) and then flow through the Star Lake Canal. Thence, all to Neches River Tidal in Segment No. 601A of the Neches River Basin, under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code. Any residual storm water that is not captured by the JWWTP is discharged via the 201 Outfall, located at the corner of Hwy 136 and Hwy 366 (near 29°58'29.6"N 93°56'44.9"W) which is permitted by the Texas Pollutant Discharge Elimination System (TPDES) Permit No.: WQ0004840000.

Power to the JWWTP was lost at the incident onset (approximately 01:00 CST on November 27, 2019) and was restored at 19:00 CST on November 28, 2019. During the power outage, residual process waste water and fire water was discharged to the TPDES Permitted 201 Outfall located at the corner of 1st and Avenue A. Boom was placed at the outfall canal, south of the Motiva facility and north of the Atlantic Canal and near the corner of Pine and Hwy 366, among other locations, as shown in **Figure 2**. Waste water and floating

debris/hydrocarbon sheen was recovered using vacuum trucks at Pine Street and Orchard Avenue bridge crossings over the 001 Outfall Canal. Skimming operations are in use to recover and containerize in portable 20,000 gallon (approximate) frac tanks set up in response to this incident as shown in **Figure 3**. Starting on November 30, 2019, fire water runoff is recycled and reused on site. The management of fire water flow is prioritized to ensure that the appropriate amount of fire water is used to avoid excessive amounts produced.

Water sampling began on November 27, 2019, at approximately 23:15 CST, and will continue until further notice. The water sampling methodology is described in the Environmental Sampling and Analysis Plan (ESAP), attached. A map showing the location of water sampling locations and water outfall points is shown in **Figure 4**.

3.0 WATER MANAGEMENT ACTIONS

TPC Group has taken prudent measures to manage waste water in a safe, environmentally responsible manner. The following documents prepared and compiled by TPC Group for TCEQ are intended to provide justification and support for the proposed water management plan. The support documentation is as follows:

1. *Texas Pollutant Discharge Elimination System (TPDES) Permit No.: WQ0004840000* for the 201 Outfall, which authorizes TPC Group to discharge storm water. *The Stormwater Management Plan*, which is part of the TPDES permit application, is based on best practices, and in coordination with onsite TCEQ representatives, serves as a site guide during initial response and subsequent remediation phases at the site.
2. *Environmental Sampling and Analysis Plan (ESAP)*, which was developed to provide technical guidance for surface water and soil/ditch sampling activities in support of initial assessment activities at the TPC Group, Port Neches facility.
3. Analytical data for samples collected from the stormwater conveyances and impounded waters at the Site, including summary tables comparing results of analyses against permitted discharge limits, as set forth by TPDES permit no. WQ0004840000 for the facility.
4. Maps of the facility, including outfalls, areas of containerized stormwater storage, sampling and earthen berm locations.

Change from version 1.0 to 1.1			
<ul style="list-style-type: none"> • <i>In the section titled:</i> • <i>Section 1: added goal of sending waters to JWWTP prior to discharge</i> • <i>Section 2: Added language about reusing recycled fire water runoff</i> • <i>Section 2: added language about using appropriate amounts of fire water to avoid excess</i> • <i>Section 2: added detail about permitted 201 outfall as part of standard processes.</i> • <i>Section 3: added change management tables</i> 			
	Name/Organization	Signature	Date Signed
Prepared by	Angie Perez, PhD		12/1/19
Reviewed by			
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Appendix A

FIGURES

Figure 1. Site location of the South Group 4 Fire.



Figure 2. Boom deployment locations for the South Group 4 Fire.

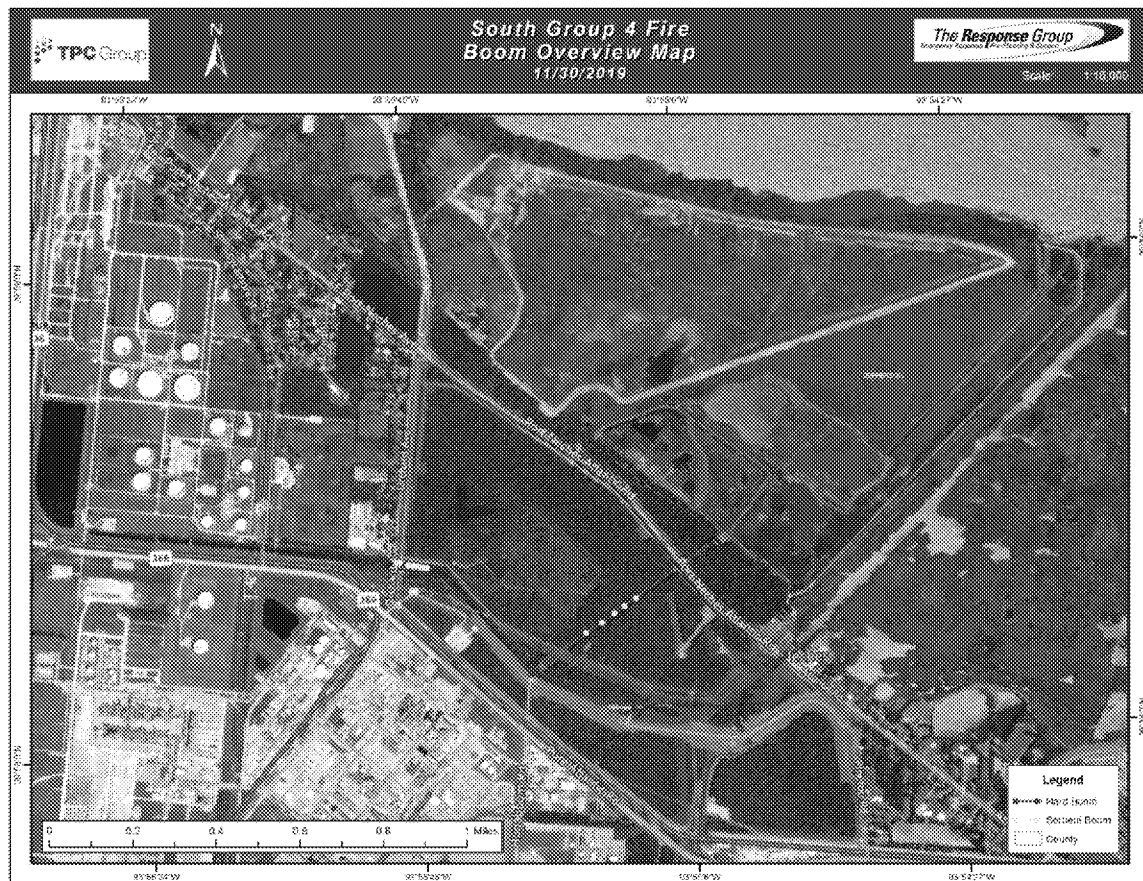


Figure. 3. Frac storage tanks holding skimmed product.



CTEH Water Sampling Locations
South 4 Group Fire I Port Neches, TX

Project: 112512
Client: TPC Group
City: Port Neches, TX
County: Jefferson

Block 6 Ponds
WWTP

WS007
WS005
WS006
WS004
WS001
WS002

0.5

Legend:
 [Symbol] Outfall Location
 [Symbol] Site Location
 [Symbol] Water Sampling Location
 [Symbol] Flow

Projection System: Transverse Mercator Datum: NAD 1983 2011 StatePlane NAD83 EPS 3101 FIPS
 *NAD 1983 Coordinates are Approximate

Last Update: 10/1/2019 9:57:45 AM

Appendix B

Attachments